



# LIT LECTURES – SCIENCE IN A NUTSHELL

16 September 2020

13.00

Forum, LIT Open Innovation Center, JKU

## Refined beam models in structural mechanics and mechatronics

Beam and plate structures are essential components of mechanical constructions. In structural engineering straight beams are simple and accurate elements for many mathematical models and important for practical applications.

**Jürgen Schöftner**  
(LIT / Institute of Technical Mechanics)

## Magnetic Topological Insulators for low-energy Electronics

Magnetic Topological Insulators (TI) will allow more energy-efficient electronics. In particular, intrinsic magnetism combined with a topologically protected surface state is highly desired and was just recently experimentally verified in  $\text{MnBi}_2\text{Te}_4$ .

**Martin Hoffmann**  
(Institute for Theoretical Physics)

## Collaborative Engineering in a Multi-Tool Environment

Conventional wisdom suggests that better engineering tools lead to better engineered systems. Yet, despite an impressive and growing computer-supported tool landscape, engineering remains complex and hard to control.

**Alexander Egyed**  
(LIT / Institute for Software Systems Engineering)

Coffee & Cakes provided.  
Please register latest by  
9 September at  
[jku.at/vas](https://jku.at/vas)

Upcoming LIT Lecture:  
11 November 2020 | 13.00